

THE TECHNICAL CONTENT OF THIS DOCUMENT IS APPROVED UNDER THE  
AUTHORITY OF DOA NR. EASA.21J.140 (C250 ISS. 6)

**8.5 RAVEN-AEROSTAR ‘BOTTOM ENDS’ WITH CAMERON ENVELOPES**

**8.5.1 GENERAL INFORMATION**

This supplement shall be inserted in the Flight Manual, in Section 8: ‘Supplements’ with the revisions record sheet amended accordingly.

Information contained herein supplements, or in the case of conflict, supersedes that contained in the basic Flight Manual. For Limitations, Procedures, and Performance Data not contained in this supplement, consult the basic Hot Air Balloon Flight Manual.

Issue 3 of this supplement consists of four pages.

There are no additional continued airworthiness requirements associated with this supplement.

**8.5.2 LIMITATIONS**

**8.5.2.2 Weather**

- 3. If the basket model TWH is fitted, the balloon must not be flown free in surface winds greater than 8 knots (4.1 m/sec). The atmosphere must be stable.

**8.5.2.9 Weight Range**

- 4. The applicable Maximum Take-off Masses where Raven-Aerostar baskets and burners are installed are given in Table 8.5.1 (Single Burners) and 8.5.2 (Double Burners). The Maximum Take-off Mass for the envelope type listed in Section 2, Table 1 of the base flight manual must not be exceeded.

**TABLE 8.5.1 : MTOM SINGLE BURNERS**

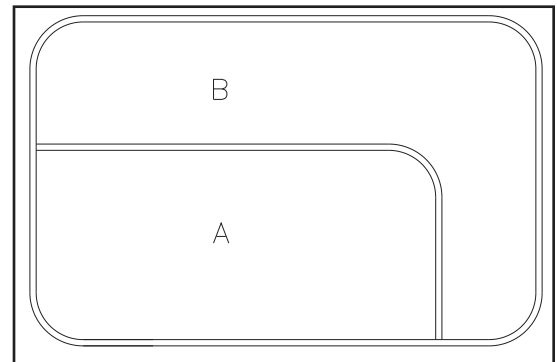
Basket Model	Basket Drawing	MTOM (kg)
ELS	(D-)52440	545
RWS	(D-)52131	667
RW	(D-)14530	667
CW	(D-)13860	667
CWS	(D-)51620	667

**TABLE 8.5.2 : MTOM DOUBLE BURNERS**

Basket Model	Basket Drawing	MTOM (kg)
RWS	(D-)52131	817
RW	(D-)14530	667
CW	(D-)13860	908
CWS	(D-)51620	908
TW	(D-)51076	1516
TWH	(D-)51077	1203
TWX	100HC4	1516

**8.5.2.15 BASKETS****8.5.2.15.6 Raven TWH Basket**

1. The maximum number of occupants permitted in compartment A is 3.
2. Lap straps must be worn by each occupant of compartment A.



▲ Figure 1 : TWH Basket Plan View

**8.5.2.18 EQUIPMENT INTERCHANGEABILITY**

1. The burners and baskets manufactured by Raven-Aerostar which may be used in combination with Cameron envelopes are listed in Section 8.5.9 of this supplement.
2. Only burner frames with four attachment points can be used.

**8.5.3 EMERGENCY PROCEDURES****8.5.3.11 PILOT LIGHT FAILURE**

Check that the pilot light valves are open at both the burner and cylinder, then relight the pilot light with igniter.

If the pilot light cannot be re-lit within two or three actuations of the igniter, open the metering valve to allow a slow fuel flow, and ignite the metering valve (to provide a pilot light), then land as soon as practicable, If re-light from any source is not possible, see Section 3.8 "Preparation for a Hard Landing"

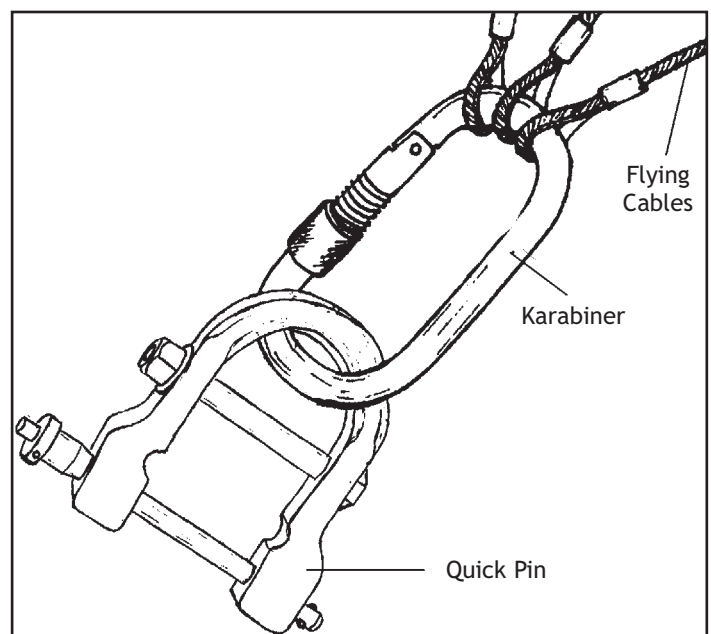
Before any subsequent flight, identify and Correct the cause of the problem. and repair any resulting damage.

**8.5.4 NORMAL PROCEDURES****8.5.4.2.4 ENVELOPE RIGGING**

The envelope karabiners with the appropriate number of flying cables must be attached to the Quick Pins. Refer to figure 2.

**8.5.5 WEIGHT CALCULATIONS**

No change.



▲ Figure 2 : Envelope Attachment

**8.5.6 BALLOON AND SYSTEMS DESCRIPTION**

**8.5.6.5.6 Raven-Aerostar Basket Model TWH**

The model TWH basket is designed to carry up to 3 passengers with special needs in a dedicated compartment. Each position within the compartment has a 5 point harness attached to the basket structure.

**8.5.7 BALLOON MAINTENANCE, HANDLING AND CARE**

Refer to the applicable Raven-Aerostar Flight Manual.

**8.5.9 EQUIPMENT LIST**

**Table 6: Raven-Aerostar Baskets (Additional)**

Basket Category	Basket Model	Basket Drawing	Basket Description	Applicable Cylinders	Applicable Burner Frames
B	ELS	(D-)52440	Aurora	1,2,3	Integral
C	RWS	(D-)52131	Classic	1,2,3	Integral
C	RW	(D-)14530	-	1,2,3	Integral
E	CW	(D-)13860	Classic Limited	1,2,3	Integral
E	CW-S	(D-)51620	Classic Limited-Stretch	1,2,3	Integral
F	TW	(D-)51076	Classic IX	1,2,3	Integral
G	TWH	(D-)51077		1,2,3	Integral
G	TWX	100HC4		1,2,3	Integral

**Note:** D- Prefix is added to baskets supplied and certified by Raven Europe where US equivalent exists.

Table 7: Raven-Aerostar Cylinders (Additional)

Cylinder Category	Drawing Number	Cylinder Material	Cylinder Model
2	51977 (D-51692)	Stainless Steel	V-15

**Note:** (D-)51692 is Aerostar Spec No. (quoted in Fiche de Navigabilité No. 177, Ed. 9),  
51977 is Aerostar Part No. (stamped on cylinder)

Table 8: Raven-Aerostar Burners (Additional)

Burner Category	Drawing Number	Burner Description (Original)	Burner Description (Raven Europe)
A	(D-)52370-02	Aurora Single	Aurora
A	(D-)17398	HP II Single	HP5-S or HP V Single
A	(D-)52370-01	HP III Single	HP6-S or HP VI Single
B	(D-)17395	HP II Dual	HP5-D or HP V Dual
B	(D-)52350(-1)	HP III Dual	HP6-D or HP VI Double
B	(D-)52350(-2)	-	HP6-E or HP VI Double

**Note:** D- Prefix and numerical suffix is added to burners supplied and certified by Raven Europe.